

39827
S/081/62/000/011/019/057
E075/E136

11. 9. 66
AUTHORS: Mashireva, L.G., and Zimina, K.I.

TITLE: Direct spectrographic determination of metals and phosphorus in oils with additives

PERIODICAL: Referativnyy zhurnal, Khimiya, no.11, 1962, 151,152,
abstract 11 D158. (Novosti neft. i gaz. tekhn.
Neftepererabotka i neftekhimiya, no.8, 1961, 15-18).

TEXT: A method is described of determining simultaneously Ca, Ba, Zn and P in lubricating oils. To prevent the influence of interfering elements a 3% solution of Li was introduced as a buffer of the solutions. Two variants were worked out for the separation of Li in discharge and standardization. According to the first variant, the analysis is carried out with three standards, prepared by diluting the same additive as the determined sample. The hot carbon electrodes are saturated with the samples and the carbons are dried for 1.5-2 hours at 400-450 °C. The internal standard Co is introduced in the form of 2% solution of Co naphthenate in oil, its quantity being 1/3 of the sample volume. The spectra are taken by ИСП-28 (ISP-28) spectrograph

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Direct spectrographic determination.. S/081/62/000/011/019/057
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with a three-lens condenser without an intermediate diaphragm
with an 0.012 mm slit. The excitation source is an alternating
current arc at 5 amperes. Electrodes: the upper - carbon
containing the sample; the lower - carbon with a rounded end:
the distance between the electrodes is 3 mm. The plates are
"spectral" ones, type I, of sensitivity 0.8 units ГССТ (GOST)
for the shortwave region of the spectrum. The calibration graphs
are linear. According to the second variant only one standard is
used irrespective of the additive type. The carbons are kept for
20-50 min in the solution containing 3% Li (Li₂CO₃ is dissolved in
water with the addition of CH₃COOH), dried with a filter paper and
used as counter-electrodes. Subsequently the analysis is similar
to the first variant. The square error in both variants 6%.
The method was applied also to used oils for the determination of
the active part of the elements. Analytical pairs of the lines
(in Å) and concentration ranges (in %, in brackets) are:
Ba 2335.3 - Co 2286.2 (0.02-0.4), Zn 3345.0, 3345.6, 3302.0,
3302.6 - Co 3044.0 (0.003-0.10), P 2535.6 - Co 2286.2 and 2373.6
(0.005-0.13), Ca 3179.3 - Co 3044.0 and 3417.2,
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*Direct spectrographic determination... S/081/62/000/011/019/057
Ca 2398.6 - Co 2276.5 and 2286.2, Ca 3006.9 - Co 3044.9
(0.05 - 0.12 and 0.1 - 0.9). [Abstractor's note: Complete translation.]*

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MASHIREVA, L.G.; ORLOVA, M.I., GOROKINA, S.B.

Determination of sodium in petroleum products by the yellow doublet with the use of the MI-28 spectrophotograph. Khim. i tekhn. (MIFT) 18(19)
topl. i mazel 10 no.10-52-55 0 165.

1. Vsesoyuznyy nauchno-issledovatel'skiy institut po pererabotke
nفتi i gazov i polucheniyu iskusstvennogo zhidkogo top i v.

YUGOSLAVIA/Chemical Technology - Chemical Products and Their
Application. Cellulose and Its Production. Paper.

H-33

Abs Jour : Ref Zhur - Khimiya, No 17, 1958, 59509

Author : Mashirevits, Bortse.

Inst : Linden (Tilia grandifolia) as a Material for the Production of Cellulose.

Title : Linden (Tilia grandifolia) as a Material for the Production of Cellulose.

Orig Pub : Glasnik chem. drushtva, 1956, 21, No 3, 171-185

Abstract : Results are cited of investigations of the physical properties and chemical composition of linden wood (LW) (Tilia grandifolia). The length of the fibers of LW are close to those of the Populus nigra, but somewhat inferior to the length of the fibers of Populus canaden-sis. A high (51-54%) yield of cellulose (C) is characteristic of LW according to the sulfite and sulfate methods. The mechanical properties of nonbleached sulfite- and sulfate-C are close to the properties of C

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MASHIRIN, B.-I.

Category: USSR/Magnetism - Ferromagnetism

F-4

Abs Jour: Ref Zhur - Fizika, No 1, 1957 No 1415

Author : Zaychikov, N. N., Zheltenkova, R. M., Kondratova, O. T., Korostylev, A. F.

Korotkov, Yu. Ye., Mashirin, B. I., Mynkin, Yu. N., Panasyuk, L. S.

Title : Investigation of the Effect of the Chemical Composition on Magnetic Properties of Electrotechnical Iron.

Orig Pub: Tr. Mosk. aviat. in-ta, 1956, vyp. 60, 4-12

Abstract: A statistical study was made of the effect of grain size of the micro-structure and of the chemical composition on the value of H_c of Armco iron, using data obtained in regular production shop tests of the melts (Chemical and metallographic data). The correlation coefficient between the value of H_c and the percentage carbon content was found to be $r_{0.1} = 0.301$, and the correlation between H_c and the percentage sulphur contents was $r_{0.1} = 0.372$. H_c increases with increasing contents of C or S. The content of Mn, P, Si, and Cu, does not exert a noticeable effect on H_c provided its value is within the GOST standard limit. A statistical comparison of the data on the size of the grain of the micro-structure of Armco iron and on H_c disclosed a linear relationship between these quantities, and the correlation coefficient was found to be $r_{0.3} = 0.555$. The maximum

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Category : USSR/Magnetism - Ferromagnetism

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Abs Jour : Ref Zhur Fizika, No 1, 1957 No 1415

effect on H_c is exerted by the size of the micro-structure grain.
The value of H_c increases with diminishing grain size. The joint
simultaneous influence of Three factors on H_c of Armco iron is
given by the multiple correlation coefficient

$$R_{0,1,2,3} = \sqrt{0.217x_{0.1} + 208x_{0.2} + 0.512x_{0.3}} = 0.653.$$

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S/186/61/003/002/008/018
E111/E452**AUTHORS:** Vdovenko, V.M., Suglobov, D.N. and Mashirov, L.G.**TITLE:** Vapour pressure over ethereal solutions of uranyl nitrate**PERIODICAL:** Radiokhimiya, 1961, Vol.3, No.2, pp.173-180

TEXT: In view of the wide use of extraction methods in uranium chemistry, considerable interest has recently been shown in the thermodynamic properties of organic solutions of uranyl salts, but few investigations have been carried out. In the present work the vapour pressure of uranyl nitrate dihydrate over the ethereal solution in concentrations up to saturation was determined at 0.3, 15, 20 and 30°C. This salt was chosen since its solution in ether can be regarded as a simple two-component system. Vapour pressure was measured by a static method in the apparatus previously described by V.M.Vdovenko and A.P.Sokolov (Ref.12: Radiokhimiya, 1, 2, 117 (1959)), a glass membrane being used as the null-instrument. Sensitivity was 0.2 to 0.3 mm Hg per mm of scale length. The apparatus was checked with water, acetone and ether. For a measurement, 10 to 15 ml of solution was placed in the apparatus, whose working space was then thoroughly degassed. The membrane Card 1/5

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Vapour pressure ...

vessel was then placed in a thermostat with temperature maintained constant to an accuracy of up to 0.02°C. After equilibrium had been reached, the membrane was brought accurately back to zero position by external pressure, the pressure being measured with a mercury manometer. After the measurement the uranyl nitrate dihydrate concentration in the test liquid was determined by ordinary gravimetric analysis for uranium content. The dihydrate was obtained by drying finely ground hexahydrate over concentrated sulphuric acid. Ether was purified by a standard procedure, dried and distilled. The experimental results are shown by continuous curves in Fig.1 as plots of pressure (mm Hg) against concentration of the dihydrate (mol fraction), curves 1 to 4 relating to temperatures of 30, 20, 15 and 0.3°C, respectively. The straight lines give the ideal (Raoult-law) relationships. Activities were calculated with the normal standard states. The activity coefficient of $\text{UO}_2(\text{NO}_3)_2 \cdot 2\text{H}_2\text{O}$ was found by graphical integration of the Gibbs-Duhem equation and is shown in Fig.2 by continuous curves as functions of concentration (mols per kg of solvent). Curves 1 to 4 relate to 0, 15, 20 and 30°C respectively. Values found by H.A.C.McKay and others were used to plot the

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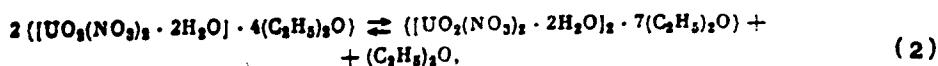
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interrupted curve. The curves indicate considerable bonding with ether. The average number of molecules of ether bound to one of the dihydrate n was found from the deviations from the Raoult law. Generally, n increases with increasing concentration and falls with increasing temperature, the highest value of 3.8 being obtained at 0.3°C and 2.0 mols/kg of solvent. These results are not in line with simple solution and indicate that the system is subject to the action of factors not allowed for in the solvation treatment. The authors consider the possibilities of polymerization, an effect which has been reported (Ref.16: A.E.Comyns, B.N.Gatthehouse, E.Wait, J.Chem.Soc., 4655 (1958)). Accepting a proposed structure (Ref.15: V.M.Vdovenko, I.G.Suglobova, D.N.Suglovov, Radiokhimiya, 1, 6, 637 (1959)) for the dihydrate, the probable mechanism of polymerization is



On the basis of the equilibrium constant K thus obtained, the
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Vapour pressure . . .

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authors derive an equation for Raoult's law in terms of the equilibrium concentration of the dimer and the dihydrate concentration: the pressure values calculated from this equation are shown by the interrupted curve in Fig.1, the deviation from experimental values above concentrations of 2.5 being due to formation of higher polymers. Better agreement could be obtained if both this further polymerization and also dissociation of solvates were to be allowed for. Other possible dimerization equations result in poorer agreement. For Eq.(2), K rises with rising temperature and the reaction is endothermic, occurring on account of entropy increase. There are 2 figures, 3 tables and 18 references: 10 Soviet-bloc and 8 non-Soviet-bloc. The four most recent references to English language publications read as follows: A.W.Gardner, H.A.C.Mckay, Trans.Farad.Soc., 48, 12, 1099 (1952); H.A.C.Mckay, Chem.Ind., 51, 1549 (1954); T.H.Siddall, J.Am.Chem.Soc., 81, 16, 4176 (1959); A.E.Comyns, B.N.Gatethouse, E.Wait, J.Chem.Soc., 4655 (1958).

SUBMITTED: March 1, 1960

Card 4/5

S/186/63/005/001/006/013
E075/E436

AUTHORS: Vdovenko, V.M., Mashirov, L.G., Blokhina, V.K.,
Suglobova, I.G., Suglobov, D.N.

TITLE: Mutual solubility in the systems uranyl perchlorate-
water-diethyl ether and uranyl perchlorate-water-
di-n-butyl ether at 25°C

PERIODICAL: Radiokhimiya, v.5, no.1, 1963, 80-89

TEXT: The work was carried out in view of insufficient knowledge on the solubilities in organic solvents of U salts other than $\text{UO}_2(\text{NO}_3)_2$. Different hydrates of $\text{UO}_2(\text{ClO}_4)_2$ and the anhydrous salt were prepared by dissolving pure UO_3 in HClO_4 and drying. In the system $\text{UO}_2(\text{ClO}_4)_2\text{-H}_2\text{O}$ -diethyl ether the critical point on the layer separation curve occurs at 25% $\text{UO}_2(\text{ClO}_4)_2$ and 5% H_2O . The aqueous and ethereal branches of the distribution curve merge. The effect of hydration on the solubility of the salt is negligible and the solubility of the anhydrous salt in ethyl ether is 35%. The salt begins to dissolve in aqueous ethereal solutions only when their H_2O content is less than 15% and the ether content of H_2O is more than 50%. The salt dissolves in H_2O -ether in the form of hydrates. Ethyl ether is Card 1/2

Mutual solubility ...

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highly soluble in concentrated aqueous $\text{UO}_2(\text{ClO}_4)_2$ solutions, the solubility increasing sharply at about 43% salt content. In n-butyl ether the concentration of $\text{UO}_2(\text{ClO}_4)_2$ in contact with its saturated H_2O solution is 0.6%. The maximum solubility in the ether is 50.5%. The solubility of the anhydrous salt in ether is 3.7%. The degree of hydration of $\text{UO}_2(\text{ClO}_4)_2$ at the point of separation of layers is 4.7 and 4.8 in ethyl- and butyl-ether respectively. This suggests that the coordination number of U in the solutions is 5. The value is supported also by the composition of crystallo-solvates and the composition of the $\text{UO}_2(\text{ClO}_4)_2$ antipyrene complex obtained by E. Wilke-Dorfurt and O. Shliephake (Z. anorg. allgem. Chem., v.170, 1-2, 1928, 129). The following solid phases were identified in the system perchlorate - water - diethyl ether: $\text{UO}_2(\text{ClO}_4)_2$ with 7, 5 and 3 molecules of H_2O , $\text{UO}_2(\text{ClO}_4)_2 \cdot \text{H}_2\text{O} \cdot 4(\text{C}_2\text{H}_5)_2\text{O}$, $\text{UO}_2(\text{ClO}_4)_2 \cdot 3(\text{C}_2\text{H}_5)_2\text{O}$. In the system with dibutyl ether the solid phases were: $\text{UO}_2(\text{ClO}_4)_2$ with 7, 5 and 3 molecules of H_2O and $\text{UO}_2(\text{ClO}_4)_2 \cdot 2(\text{C}_4\text{H}_9)_2\text{O}$. There are 4 figures and 2 tables.

SUBMITTED: November 2, 1961
Card 2/2

V. DVENKOV, V.M.; MASHIPOV, L.G.; TUGOLIKOV, I.N.

Infrared spectra of uranyl perchlorate and its crystal hydrates.
Coordination of a perchlorate ion. Radiokhimika 6 no.3:299-
305 '64. (MIRA 18:3)

VDOVENKO, V.M.; MASHIROV, L.G.; SUGLOBOV, D.N.

Uranyl perchlorate complexes with neutral ligands. Dokl. AN SSSR
163 no.1:100-102 J1 '65. (MIRA 18:7)

1. Chlen-korrespondent AN SSSR (for Vdovenko).

MASHIROV^s, T. P.

YEGGROV, I. A. (Candidate of Veterinary Sciences)
LEONT'EV, F. M. AND MASHIROV, T. P.
(Junior Scientific Collaborators, Sanitaro-Prophylactic Department,
Kazan Scientific Research Veterinary Institute).
Concerning the toxic properties of DDT for horses.

Source: Veterinariya; 25; 9; September 1948; uncl
TABCON

~~P.7.~~

~~TOP~~

MACHIROV, ~~P.7.~~

P. S. Ivanova, M. I. Salikov. Preduvrezhdeniye zabolevaniy molodych sel'skokhozyaystvennykh zhivotnykh (Prevention of Diseases in the Young of Farm Animals). Ivanovo. Ivgiz. 1950. 52 pages with illustrations.

U-5235

MASHIROV, P.T., dottsent

Utility and physiological indices of Vladimir draft horses in
testing their walking speed. Sbor. nauch. trud. Ivan. sel'khoz.
Inst. no.19:231-237 '62. (MIRA 17:1)

1. Kafedra veterinarii i zoogigiyeny (zav. - prof. F.F. Porokhov)
Ivanovskogo sel'skokhozyaystvennogo instituta.

MASHIROV, V.Ye.; NIKOLAYEV, A.M.

Effect of heat exchanger construction on temperature conditions
in a catalyst case of ammonia synthesis stills. Izv.vys.ucheb.
zav; khim.i khim.tekh. 4 no.5:859-862 '61. (MIRA 14:11)

1. Kazanskiy khimiko-tehnologicheskiy institut imeni S.M.
Kirova, Nafedra khimicheskogo Mashinostroyeniya.
(Heat exchangers) (Catalysts) (Ammonia)

MASHIROV, Ye.T., detsent.

Trichinosis in wild animals of the Tatar A.S.S.R. Veterinarilia
32 no.1:36-39 Ja '55. (MLRA 8:2)

1.Kazanskiy veterinarnyy institut i Volsheks-Kamskaya zonal'naya
laboratoriya VMIO.
(TATAR A.S.S.R.--TRICHINA AND TRICHIOSIS)

MASHIROV, Ye.T.

Trichinosis in wild animals of the Tartar A.S.S.R. Zool.Zhar. №
no.5:1008-1011 8-0 '55. (MLRA 9:1)

1.Kazanskiy gosudarstvennyy veterinarnyy institut i Volzhsko-
Kamskaya zonal'naya laboratoriya Vsesoyuznogo nauchno-issledovatel'-
skogo instituta okhotnic'ego promysla. Zool.shur. no.5:1008-1011
8-0 '55. (MLRA 9:1)

(Tatar A.S.S.R.--Trichina and trichinosis)

MASHIROVA, O. F.

Mbr., Military Medical Academy im. S. M. Kirov, -cl040-.
"The Relationship between Complementary and Contrasting Colors," Dok. AN, '7, No. 1,
1949;
"The Relationship between the Intensity of Simultaneous Color Contrast and the
Saturation and Color Tone of Induced Color," Dok. AN, '7, No. 1, 1949.

21576 FEDOROV, N. N.; SKLYARENKO, V. V. I. VLASOVSKIY, S. F.
O zavisimosti inten siumposti s novremennoego i vremya konflikta ot
rashchennosti i tsvetovogo tona indutsiruyushchego sveta.
Doklady Akad. nauk SSSR, Novaya seriya, t. LXVII, No. 2, 1949, n. 242-250.
Bibliogr. 11, Nazyv.
CC: Letopis' Zhurnal'nykh Statey, No. 29, Moskva, 1949

MISHCHENKO, N.M., inzh.; BERDICHEVSKIY, Ye.Ye., inzh.; TERMINOSYAN, N.S.,
inzh.; KURILOV, A.I., inzh.; POLYAKOV, M.M., inzh.; DEMIDOVICH,
Ye.A., inzh.; PINDYURIN, N.I., inzh.; Prinimali uchastiye:
MALINOVSKIY, V.G.; MOLCHANOV, I.V.; MASHISHINA, M.P.; YEMCHENKO,
Ye.K.; CHEREDNICHENKO, A.A.; STEPANOV, V.A.; SKACHKOV, L.N.
[deceased]; KOSHMAN, A.I.; SHCHEKLIN, V.V.; CHUBATYUK, Ye.G.;
KHITOVA, Ye.Ye.; KOROBOVA, G.Z.; ROTMISTROVSKIY, B.M.; VEYSBEYN, A.D.

Increasing the efficiency of section tandem mills by the use of
repeaters. Stal' 23 no.3:236-241 Mr '63. (MIRA 16:5)

1. Yenakiyevskiy metallurgicheskiy zavod.

(Rolling mills--Equipment and supplies)

MASHISTOV, A.I. kandidat ekonomicheskikh nauk.

Method of working out heightened standards for the preparation
of stamps and compression molds. Trudy LIBI no.14:121-145 '57.
(~~norm~~ 10:7)

(Punching machinery) (Industrial management)
(Production standards)

MASHIS 100, n.s.

Klimov, A.N.

25(5) f3 PHASE I BOOK EXPLOITATION 807/1992

Leningrad. Inzhenerno-ekonomicheskiy institut

Organizatsiya i planirovaniye razvivayushchey raboty mashinostroitel'nykh predpriyatiy;
Mashinostroiteльnye sovetschiashchiye. Doklady (Organization and Planning of Uniform
Work in Machine-Building Enterprises; Conferences of Unions. Reports) Moscow, Naukograd,
1978. 260 pages; Issled. Trudy, vyp. 82) 4,000 copies printed.

Eds.: S.A. Vakhov, and Z.G. Batrakov. Tech. Ed.: L.V. Smirnov; Managing Ed. for
Literature on Machine-Building Technology (Naukograd); Ye.P. Klimov, Engineer.

PURPOSE: This collection of articles is intended for engineering and technical
personnel in machine-building establishments, and for scientific workers and
students of institutes and departments of engineering and economics.

CONTENTS: This collection of articles contains reports by workers from unions,
scientific research institutes, and industrial establishments presented at the
conferences of unions on the subject: "Organization and Planning of Uniform
Operations in Machine-Building Establishments." These reports discuss general
problems encountered in organization, analysis, and theory of uniform production,
as well as problems in schedule planning, technical preparation, and production
specialization.

Contd 1/8

Batrakov, A.J., Candidate of Economic Sciences (Leningrad Institute of
Engineering and Economics). Methodology Used in Establishing Consolidated
Standards for Labor Content During Data Production of a Site (Based on the
example of plants in the Instrument-manufacturing Branch) 808

MASHISTOV, A.I., kand. ekon. nauk

Developing consolidated rates of labor consumption for making
moldes; experience of instrument plants. Trudy LIMI no.22:
205-216 '58. (MIRA 11:12)

1. Leningradskiy inzhenerno-ekonomicheskiy institut.
(Industrial management)

"APPROVED FOR RELEASE: 07/12/2001

CIA-RDP86-00513R001032710019-7

MASHKANTSIVA, K.D.

Lake Engozero. Trudy Kar.fil.AN 8888 no.18:114-125 '58.
(MIRA 12:10)
(Engozero, Lake)

APPROVED FOR RELEASE: 07/12/2001

CIA-RDP86-00513R001032710019-7"

MASHKANTSEVA, K.D.

Upper Suna lakes of the Cheba group: Lake Luboyarvi, Lake
Vonger, and Lake Myarat. Trudy Kar.fil.AN SSSR no.18:126-135
'58. (MIRA 12:10)
(Suoyarvi District--Lakes)

MASHKARA, I.I.

Conference of geologists of the Ukrainian Geological Administration
of the Ministry of Geology and Conservation of Mineral Resources.
Geol. zhur. 17 no.2:92-93 '57.
(MLRA 10:11)
(Geology)

MASHKARA, K. I.

"Dislocation of the Shoulder and its Consequences,"
Khirurgiya, No. 10, 1929. Mr. United Surgical Clinic,
Lat. Leningrad Med. Inst. I. P. Pavlov, -elating.

MASHKARA, K.I.

USSR/Medicine - Roentgenology

FD-702

Card 1/1 : Pub 132 12/22
Author : Mashkara, K. I., Assistant
Title : Effect of professional work load on the tubular wrist bones of drivers
and loaders
Periodical : Vest. Rent i Rad. 59-65, May/June 1954
Abstract : Measured the dimensions of the wrist bones of drivers and loaders from
X-rays and determined the changes that take place as a result of the
work load. Six photographs (X-rays). 25 references, all USSR.
Institution : Chair of Normal Anatomy (Head - Professor M. G. Prives) I Leningrad
Medical Institute imeni Academician I. P. Pavlov (Director - Docent
A. I. Ivanova)
Submitted : --

MASHKARA, K.I.

Effect of work on the structure of tubular bones of the hand in certain occupational groups. Arkh. anat. gist. i embr. 32 no.3:
82-88 Jl-8 '55. (MLRA 9:5)

1. Is kafedry normal'noy anatomi (zav.-prof. N.G. Prives) i Leningradskogo meditsinskogo instituta imeni I.P. Pavlova (diplomant A.I. Ivanov)
(HAND, anatomy and histology.
bone structure in various occup. groups)
(INDUSTRY AND OCCUPATIONS,
hand bone structure in various occup. groups)

MASHKINA, K. I.

Experience with surgery in localized deep burns [with summary in English, p.155]. Khirurgia 33 no.2:100-103 F '57. (MLRA 10:6)

1. Iz Travmatologicheskogo punkta polikliniki (zav. A.M.Shukhtina) i Leningradskogo meditsinskogo instituta imeni I.P.Pavlova (dir. - dotsent A.I.Ivanov)
(BURNS, surg.
technic in local third degree burns (Burns))

MASHKARA, K.I. (Leningrad, P-3, Gatchinskaya ul., 12, kv.21)

Dynamics of the symptoms of working hypertropy of the osseous system
in some physical workers and ballet dancers. Arkh. anat. gist. i embr.
(MIRA 13:7)
38 no.1:93-98 Ja '60.

1. Kafedra normal'noy anatomii (zaveduyushchiy - prof.M.G.Prives)
I Leningradskogo meditsinskogo instituta im. akad.I.P.Pavlova.
(BONES—DISEASES)

MASHKARA, K.I. (Leningrad P-3, Gatchinskaya ul., 12, kv.21)

Effect of exercises on musical instruments on the formation of the
osteocarticular apparatus of the hand in adolescents. Arkh. anat.,
gist. i embr. 41 no.11:62-70 N '61. (MIKA 14:12)

1. Kafedra normal'noy anatomii (zav. - prof. M.G.Prives) I Leningrad-
skogo meditsinskogo instituta imeni akademika Pavlova.
(HAND) (EXERCISES)

MASHKARA, K. I. (Leningrad. P-3, Gatchinskaya ul., 12, kv. 21)

Effect of a professional load on the structure of tubular bones
of the wrist of female insulators. Arkh. anat., gisto. i embro.
47 no. 11g26-33 N '64 (MIK 1981)

1. Kafedra normal'noy anatomi (zav. - prof. M.G. Prives) 1-go
Leningradskogo meditsinskogo instituta imeni Pavlova. Submitted
February 6, 1963.

MASHKARENKO, A., inzhener-podpolkovnik; TOLSTOV, S., inzhener-podpolkovnik;
KUNIN, V., inzhener-polkovnik; NETYKSA, V., podpolkovnik

Evacuation of tracklaying vehicles. Tekh. i vooruzh. no. 6:
(MIRA 1787)
46-49 Je'64

MIKHOV, N., inzh.; TSANEVA, N., d-r, starshi nauchen sutrudnik;
MASKAROV, B., inzh., starshi nauchen sutrudnik; LUKANOV, M.,
d-r dots., starshi nauchen sutrudnik; STAROSTINA, V., arkh.;
DOROSIEV, B., arkh; BELCHEV, N., arkh.; GUGOV, N., inzh.

Conference on science and technology for youth. Nauka i tekhnika
mladezh 14 no.6:2-4 Je '62.

1. Direktor na fabrika "Ernst Telman", Sofiia (for Mikhov).
2. Institut po okhrana na truda i profesionalnite bolesti (for Tsaneva, Maskarov, and Lukanov). 3. Starshi proektant pri "Zavodproekt" (for Starostina). 4. Glaven spetsialist pri Komiteta po promishlenostta (for Dorosiev). 5. Grupov rukovoditel pri "Promprojekt" (for Belchev). 6. Nachalnik Otdel "Mashinostroenie i elektropromishlenost" pri Komiteta po tekhnicheskiia progres (for Gugov).

MASHKANTSAY, S.

Planning the training and qualification improvement of skilled workers. Prof.-tekhn. obr. 20 no.5120-27 Je '53. (MIRA 1:1?)

1. Nachal'nik otdela podgotovki kadrov Yuzhnoural'skogo soveta narodnogo khozyaystva.
(Magnitogorsk—Iron and steel workers—Education and training)

MITROFANOV, V.; ZUYEV, I.; MASHKAUTSAN, S.; YARTSEV, G.; KAMKIN, L.; ZBARSKIY, S.; GLUSHCHENKO, M.; ROZKIN, G.

Shortcomings of the stage system of teaching. Prof.-tekhn. obr. 21
(MIRA 17:11)
no. 7:29-31 Jl '64.

1. Nachal'nik otdela podgotovki kadrov Yuzhno-Ural'skogo soveta narodnogo khozyaystva (for Mitrofanov)
2. Direktor tsentral'nogo uchebnogo kombinata Yuzhno-Ural'skogo soveta narodnogo khozyaystva (for Zuyev).
3. Nachal'nik otdela tekhnicheskogo obucheniya Chelyabinskogo traktornogo zavoda (for Yartsev).
4. Nachal'nik otdela tekhnicheskogo obucheniya Chelyabinskogo metallurgicheskogo zavoda (for Kamkin).
5. Direktor TSentral'nego uchebnogo kombinata "Glavyushuralstroy" (for Zbarskiy).
6. Nachal'nik otdela tekhnicheskogo obucheniya Magnitogorskogo metallurgicheskogo kombinata (for Glushchenko).

REZIN, M.G., kand.tekhn.nauk, dotsent; KROPACHEV, G.P., kand.tekhn.nauk,
dotsent; DROBININ, Ya.I., inzh.; KOCHNEV, E.K., inzh.;
GOLUBEV, N.S., inzh.; MASHKAUTSAN, V.V., inzh.

"Physical and mathematical principles of magnetic transportation
of molten metals" by G.A. Ostromov. Reviewed by M.G. Rezin and
others. Elektrichestvo no.7:91-93 Jl '62. (MIRA 15:7)
(Liquid metals)
(Ostromov, G.A.)

PENYAZ'KOVA, V.P.; MASHKAUTSAN, V.V.

Laboratory modeling equipment. Trudy Ural. politekh. inst. no.133:
(MIRA 17:9)
17-24 '63.

REZIN, M.G.; BRISKMAN, V.A.; MASHKAUTSAN, V.V.

Results of the investigation of electromagnetic stirring processes
with the help of laboratory equipment. Trudy. Ural. politekh. inst.
no.133:25-33 '63. (MIA 17:9)

DOZORTSEVA, G.L; MASHKELEYSON, A.I.

Tissue therapy in gynecology. Sovet. med. no.9:28-29 Sept
1950.
(CIML 20:1)

1. Of the Obstetric-Gynecological Clinic, Minsk Medical Institute
(Director -- Honored Worker in Science Prof. N. L. Vydrin).

MACHINLEY A. N.

A. MACHINLEY, A. N.: "On changes in the bilirubin, sugar, and urea content of the blood, and physiological changes in the vaginal contents, in gynecological patients with inflammatory processes of the internal reproductive organs under the influence of tissue therapy." Minsk State Medical Inst. Minsk, 1956.
(Dissertation for Degree of Candidate in Medical Sciences).

SO: Knizhnaya letopis', No. 4, 1956

N.
MASHKELEVSON, A.; SERZHANIN, P.; STAROVYOTOV, I.

Tenth All-Union Congress Obstetricians. Zdrav. Belor. 4 no.2:68-70
P '58. (MIRA 13:8)
(OBSTETRICS—CONGRESSES)

MASHKELEYSON, A.N.

Ruptures of the uterus during labor and pregnancy. Zdrav.Bel. 8
no.7:54-55 J1 '62. (MIRA 15:11)

1. Iz akushersko-ginekologicheskoy kliniki Minskogo meditsinskogo
instituta.

(PREGNANCY, COMPLICATIONS OF)
(LABOR, COMPLICATED)
(UTERUS--RUPTURE)

LAPANASHVILI, I.G.; MASHKELEYSON, L.N., prof., red.

[Materials on dermatological terminology] Materialy k
dermatologicheskoi terminologii. Tbilisi, Gos.izd-vo
"Sabchota Sakartvelo," 1963. 280 p. (MIRA 17:5)

MASHKET, K.M., inzh; INFANT'YEV, A.N., inzh.

Huge mine in the Kursk Magnetic Anomaly. Shakht. stroi.
5 no. 5:6-8 My '61. (MIRA 14:6)

1. Gosstroy SSR (for Mashket). 2. Yakovlevskiy rudnik Kurskoy
magnitnoy anomalii (for Infant'yev).
(Kursk Magnetic Anomaly--Iron mines and mining)

MASHKET, K.M., inzh.

Standardization of the cross sectional dimensions of mine
haulageways. Shakht. stroi. 5 no.9-11 S '61. (MIRA 16:7)

1. Gosstroy SSSR.
(Mine haulage)

MASHKET, K.M., inzh.

Conference on the exchange of practices in the design, planning,
and construction of dressing plants for the iron ore industry.
Shakht.stroi. 6 no.1:31-32 Ja '62. (MIRA 14:12)
(Ore dressing)

MASHKEVICH, A.A.

AID P - 2171

Subject : USSR/Medicine

Card 1/1 Pub. 37 - 13/22

Authors : Mashkevich, A. A. and Stanislavskiy, Ye. S., Sanitary Inspectors

Title : From experience in working for the improvement of the qualifications of sanitary personnel

Periodical : Gig. i san., 4, 49, Ap 1955

Abstract : Describes the work organized in 1953 by the Frunze Department of Health to improve knowledge and skills of physicians and other medical personnel: courses, seminars and lectures on various problems of epidemiology, microbiology, hygiene, prophylaxis, etc.

Institution : Frunze Regional Medical and Epidemiological Station

Submitted : Mr 22, 1954

MASHKEVICH, A.A.; STANISLAVSKIY, Ye.S.; BURMIN, L.S., red.

[Hygienic aspects of the rural water supply] Gigiena sel'skogo
vedesnabzheniya. Frunze, 1956. 42 p. (MIRA 12:5)
(Water supply, Rural)

YEVDOSENKO, V.Sh.; MINEYEVA, R.M.; MASHKEVICH, A.A.; CHIKHALOVA, V.S.

Preliminary results of mass immunisation of the population of
Kirghizistan with "live" poliomyelitis vaccine. Sov. zdrav. Kir.
no.1:38-43 Ja-F '62. (MIRA 15:4)

1. Iz Kirgizskogo instituta epidemiologii, mikrobiologii i gigiyeny
(direktor - kand.med.nauk V.M.Pereygin).
(KIRGHIZISTAN--POLIOMYELITIS)

MASHKEVICH, A.A.; PERELYGIN, V.M.; AN, A.S.

Pollution of the Chu River with sewage waters and the ways for its
sanitary purification. Sov. zdrav. Kir. no.2:49-53 Mr-Ap '62.
(MIRA 15:5)

1. Iz Kirgizskogo instituta epidemiologii, mikrobiologii i gigiyeny
(direktor - kand.med.nauk V.M.Perelygin).
(CHU RIVER--WATER--POLLUTION)

MASHKEVICH, A. O.

Kharakteristika aeroshin i vybor ikh ratsional'nykh razmerov. (Tekhnika vozdushnogo flota, 1937, v. 11, no. 8, p. 25-32, tables, diagrs.)

Title tr.: Characteristics of airplane tires and the selection of their rational dimensions.

TL504.Th 1937

SO: Aeronautical Sciences and Aviation in the Soviet Union, Library of Congress, 1955.

~~MASHKOVICH, O. A.~~

Preliminary data on photographic chronometric observations made at
the Novosibirsk Aerial Geodetic Institute. Geod. i kart. no. 5:74-76
My '57.
(MIRA 10:8)

1. Novosibirskskoye aerogeodesicheskoye predpriyatiye.
(Novosibirsk--Aerial photography)

MASHEVICH, I. A.

b(2)(3)(A); b(1) b(2) or b(3) b(7D)

Silovye ustroystva vertoletov: shornik statey (Helicopter Power Units: collection of articles), Moscow, Sov. promiz, 1970. 104 p. Errata slip inserted. 7,400 copies printed.

Ed.: M. M. Chernenkov, Professor; Publishing Ed.: A. S. Zaytsevskaya;
Ed. of Publishing House: I. A. Suvorova; Tech. Ed.: V. P. Rozhin.

PURPOSE: This book is intended for specialists who design, manufacture and operate helicopters, and may also be used by instructors and students of schools of higher technical education.

Coverage: This book contains 7 articles which discuss problems connected with the application of gas turbines for driving helicopter rotors and with jet driven rotors. The author is particularly concerned with increasing the power, economy, useful load, and flight distance of helicopters. There are references, both Soviet and non-Soviet, in footnotes throughout the book.

- 5. Khasilova, D. F. Method of Analysis of Characteristics of Free Turbine Turbo-prop Engines for Helicopters. 114
The analysis described differs from other methods in the consideration of exhaust conduit characteristics and in more precise evaluation of the influence of turbine rotation on engine characteristics. The method is comparatively simple.
- 6. Rykhli, V. O. and I. I. Mashkevich. Evaluation of the Possibility of Using Exhaust Gases in the Compressor Reactive Drive of Helicopter Motor Blades (Gas-air mixture system). 147
This article is based on French and English experiments in 1952 and 1955 on the use of turbine gases to drive helicopter rotor blades. (Doran's DH-Oil and Napier's Oryx Gas Generator)
- 7. Kaganovich, B. P. Some Problems of Helicopter Motor Blades Driven by Turbojet Engines. 167
The author describes the operating conditions of turbojet engines mounted on helicopter rotor blades and suggests some solutions of basic technical problems connected with this propulsion method.

AVAILABLE: Library of Congress (TL716.M8)

Card 4/4

AC/mmh
4-13-60

"APPROVED FOR RELEASE: 07/12/2001

CIA-RDP86-00513R001032710019-7

KALACHNIKOV, A.Ya.; MASHKEVICH, K.S.

New VIaP-6 type high-voltage panelboards for coal mines. Ugol' 29
no. 5:35-37 My '54.

(MLRA 7:6)

1. Dneproiproekt. (Electricity in mining) (Electric switchgear)

APPROVED FOR RELEASE: 07/12/2001

CIA-RDP86-00513R001032710019-7"

11/11/1986: 14:11:12

ALEKSANDROV, B.F., inzh.; BALYKOV, V.M., inzh.; BARANOVSKIY, F.I., inzh.; BOGUTSKIY, N.V., inzh.; BUN'KO, V.A., kand.tekhn.nauk, dotsent; VAVILOV, V.V., inzh.; VOLOTKOVSKIY, S.A., prof., doktor tekhn.nauk; GRIGOR'YEV, L.Ya., inzh.; GRIDIN, A.D., inzh.; ZARMAN, L.N., inzh.; KOVALEV, P.F., kand.tekhn.nauk; KUZNETSOV, B.A., kand.tekhn.nauk, dotsent; KUSNITSYM, G.I., inzh.; LATYSHEV, A.F., inzh.; LEYBOV, R.M., doktor tekhn.nauk, prof.; LYNTES, Z.M., inzh.; LISITSYM, A.A., inzh.; LOCHANIN, K.A., inzh.; LYUBIMOV, B.N., inzh.; MASHKEVICH, K.S., inzh.; MALKHAS'YAN, R.V.; MILOSERDIN, M.M., inzh.; MITNIK, V.B., kand.tekhn.nauk; MIKHAYEV, Yu.A., inzh.; PARAMONOV, V.I., inzh.; ROMANOVSKIY, Yu.G., inzh.; RUBIMOVICH, Ye.Ye., inzh.; SAMOILYUK, N.D., kand.tekhn.nauk; SEMENOV, V.K., inzh.; SMOLDYREV, A.Ye., kand.tekhn.nauk; SNAGIN, V.T., inzh.; SNAGOVSKIY, Ye.S., kand.tekhn.nauk; FEYGIN, L.M., inzh.; FRENKEL', B.B., inzh.; FUJMAN, A.A., inzh.; KHORIN, V.N., dotsent, kand.tekhn.nauk; CHETVEROV, B.M., inzh.; CHUGUENIKHIN, S.I., inzh.; SHELKOVNIKOV, V.N., inzh.; SHIRYAYEV, B.M., inzh.; SHISHKIN, N.P., kand.tekhn.nauk; Slepil'BERG, I.L., inzh.; SHORIN, V.G., dotsent, kand.tekhn.nauk; SEPOKMAN, I.G., doktor tekhn.nauk; SHURIS, N.A., inzh.; TERPIGOROV, A.M., glavnnyy red.; TOPCHIYEV, A.V., otv.red.toma; LIVSHITS, I.I., zamestitel' otv.red.; ABRAMOV, V.I., red.; LADYGIN, A.M., red.; MOROZOV, R.N., red.; OZERNOY, M.I., red.; SPIVAKOVSKIY, A.O., red.; FAYBISOVICH, I.L., red.; ARKHANGEL'SKIY, A.S., inzh., red.;

(Continued on next card)

ALEXANDROV, B.P.---(continued) Card 2.

BELYAYEV, V.S., inzh., red.; BUKHANOVA, L.I., inzh., red.; VLASOV,
V.N., inzh., red.; GLADILIN, L.V., prof., doktor tekhn.nauk, red.;
GREBTSOV, N.V., inzh., red.; GRECHISHKIN, P.G., inzh., red.; GOM-
CHAROVICH, I.F., kand.tekhn.nauk, red.; GUDALOV, V.P., kand.tekhn.
nauk, red.; IGNATOV, N.N., inzh., red.; LOMAKIN, S.M., dotsent, kand.
tekhn.nauk, red.; MARTYNOV, M.V., dotsent, kand.tekhn.nauk, red.;
POVOLOPSKIY, I.A., inzh., red.; SVETLICHNYY, P.L., inzh., red.; SAL'-
TSWICH, L.A., kand.tekhn.nauk, red.; SPERANOV, A.V., kand.tekhn.
nauk, red.; SHETLER, G.A., inzh., red.; ABARBARCHUK, V.I., red.izd-va;
PROZOROVSKAYA, V.L., tekhn.red.; KONDRAT'YEVA, M.A., tekhn.red.

[Mining; an encyclopedic handbook] Gornoe delo; entsiklopedicheskii
spravochnik. Glav.red.A.M.Terpigorev. Chleny glav.redaktsii A.I.
Baranov i dr. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po gornomu delu.
Vol.7. [Mining machinery] Gornye mashiny. Redkol.toma A.V.Topchiev i
dr. 1959. 638 p. (Mining machinery) (MIRA 13:1)

SHIRNOV, V.M., doteent; MASHKEVICH, L.N., assistant

Using the electric capacitance method in determining the water
content of bitumens. Avt.dor. 23 no.3:13 Mr '60. (MIRA 13:6)
(Bitumen)

MASHKEVICH, L. S.

PA 192T68

"Pathologie - Blood Transfusion . 32/48 31 .
Dependence of the Heterotransfusion Shock on
Phylogenetic Relationships Between the Animals,"

L. S. Mashkevich, Chair of Pathophysiol, Chelyab-
insk Med Inst

"Acta Veter." Vol XIII, No 4, pp 27-33

Contrary to general impression that transfusion of
heterogeneous blood always results in death or no
patient, found that 7/8 of the blood of jackal
could be replaced with wolf blood, 9/10 of blood
of wolf with dog blood, 6/7 of the blood of dog

"Pathologie - Blood Transfusion . 32/48 31 .
(Contd)

with wolf blood and 4/5 with fox blood without
lethal outcome. Type of vascular reaction to
intero-transfusion varies with different ani-
mals. Intensity of shock depends on the extent
of the circulatory disturbance. Compatibility
of blood is determined by the phylogenetic relation
ship only for closely related species. This
rule does not hold otherwise: thus, dogs can
better transfusion of blood of cat, man, and
sometimes even turtles and ducks than that of
less closely related bears, badgers, or
seals.

192T68

MASHKEVICH, L.S. [Mashkevych, L.S.]

Specificity of normal hemagglutinins of human serums. Fiziol.
zhur. [Ukr.] 5 no.3:352-356 My-Je '59. (MIRA 12:10)

1. Chelyabinskiy medichniy institut, kafedra patologichnoi
fisiologii.
(HEMAGGLUTININ)

MASHKEVICH, L.S. (Chelyabinsk)

Data for a study of normal hemagglutinins in human sera. Pat.
fiziol.i eksp.terap. 4 no.2:27-32 Mr-Apr '60. (MIRA 14:5)

1. Is kafedry patologicheskoy fisiologii (zav. - prof. R.A.
Dymshits) Chelyabinskogo meditsinskogo instituta.
(HEMAGGLUTININ)

USSR/Meadow Cultivation.

L

Abs Jour : Ref Zhur Biol., № 14, 1958, 63269

Author : Kayukhan, M.A., Konakov, M.K., Mashkevich, N.G.,
Skorokhod, V.G.

Inst : Voroshilovgrad Agricultural Institute.

Title : Meadows of Kolkhoz imeni Budenny of Novo-Aydarskiy
Rayon and Ways to Improve Them.

Orig Pub : Nauchn. sap. Voroshilovgradsk. s.-kli. in-ta, 1956, 4,
No 1, 88-97

Abstract : No abstract.

Card 1/1

GORYACHKIN, M.I., kand.ekon.nauk, nauchnyy sotrudnik; RUSAKOV, G.K.,
kand.sel'skokhos.nauk, nauchnyy sotrudnik; MASHKEVICH, N.G.,
kand.sel'skokhos.nauk, nauchnyy sotrudnik; KLADCHIKOV, S.N.,
kand.sel'skokhos.nauk, nauchnyy sotrudnik; NOVOZHILOV, V.P.,
kand.sel'skokhos.nauk, nauchnyy sotrudnik; ALEXANDROV, N.P.,
kand.sel'skokhos.nauk; BUTENOVICH, B.G., kand.sel'skokhos.
nauk; KORNIYEV, K.G., kand.sel'skokhos.nauk; GRETTSOV, P.P..
red.; PENVZNER, V.I., tekhn.red.; TESHIMA, O.H., tekhn.red.

[Plotting technological charts] Kak sostavit' tekhnologicheskie
karty. Moskva, Gos.isd-vo sel'khoz.lit-ry, 1960. 78 p.
(MIRA 14:2)

1. Moscow. Vsesoyuznyy nauchno-issledovatel'skiy institut
ekonomiki sel'skogo khozyaystva. 2. Vsesoyuznyy nauchno-issle-
dovatel'skiy institut ekonomiki sel'skogo khozyaystva (for-
Goryachkin, Rusakov, Mashkevich, Kladchikov, Novozhilov).
(Farm management)

GAVRILOV, V.I.; LABENETS, V.F.; MASHKEVICH, N.G.; VANYUKOV, S.F.; GRELKOV, K.A.

[Model technological charts for growing and harvesting farm crops applicable in working out scientific farming systems and compiling long-range and yearly plans for collective and yearly state farms of Ryazan Province] Primenye tekhnologicheskie karty po vospolzovaniyu i uborke sel'skokhozyaistvennykh kul'tur dlja ispol'zovaniia pri razrabotke nauchno-obosnovannykh sistem vedenija khoziaistva, sostavleniia perspektivnykh i godovykh planov ego rasvitiija v kolkhozakh i sovkhozakh Riazanskoi oblasti. Riazan', 1960. 169 p.

(MIRA 14:6)

1. Vsesoyuznaya akademiya sel'skokhozyaystvennykh nauk imeni V.I.Lenina. 2. Rukovoditel' brigady Vsesoyuznoy akademii sel'skokhozyaystvennykh nauk imeni V.I.Lenina (for Gavrilov). 3. Ryazanskoye oblastnoye upravleniye sel'skogo khozyaystva (for Vanyukov, Grelkov).

(Ryazan Province—Agriculture)

(Ryazan Province—Field crops)

GAVRILOV, V.I.; LABENETS, V.F.; MASHKEVICH, N.G., kand. sel'skokhoz.nauk

[Model norms for working out scientifically tested methods for making long-range and annual plans for the development of agriculture on collective and state farms of Ryazan Province]
Primernye normativy dlia razrabotki nauchno-obsnovannykh sistem vedeniya perspektivnykh i godovykh planov rasvitiia sel'skogo khoziaistva v kolkhozakh i sovkhozakh Riazanskoi oblasti. Moskva, 1960. 233 p. (MIRA 13:7)

1. Ryazanskaya oblast'. Upravleniye sel'skogo khozyaystva.
 2. Otdel razmeshcheniya i spetsializatsii Vsesoyuznogo nauchno-issledovatel'skogo instituta ekonomiki sel'skogo khozyaystva (for Gavrilov, Labenets, Mashkevich).
- (Ryazan Province--Agriculture)

BAKULIN, I.I., starshiy nauchnyy sotrudnik; BOGACHIK, I.A., starshiy nauchnyy sotrudnik; KNYAZEV, N.K., starshiy nauchnyy sotrudnik; MASHEVICH, N.G., starshiy nauchnyy sotrudnik; PIS'MENNYY, I.G., starshiy nauchnyy sotrudnik; UDOVENKO, Ye.Ya., starshiy nauchnyy sotrudnik

Specialization of farms for securing the supply of fresh milk to the population of large cities. Zhivotnovodstvo '23 (MIRA 16:2) no. 7:16-23 Jl '61.

1. Vsesoyusnyy nauchno-issledovatel'skiy institut ekonomiki sel'skogo khozyaystva.
(Dairying)

MOSHCHINSKAYA, N.K., doktor khim. nauk; KISLITSYNA, I.G., kand.tekhn. nauk;
KRUKOVSKIY, S.P.; MASHKEVICH, G.I.; POTIYEVSKAYA, S.A.; KBANTS V,
V.S.; KUTSYGINA, V.V.; ZEMLYANSKAYA, L.K.

New binders in the production of particle boards. Sum. i der. prom.
no.2:14-15 Ap-Je '64. (MIRA 17:9)

L 31986-66 EWT(m)/EWP(w)/EWA(d)/T/EWP(t)/ETI IJP(c) JD/JG
ACC NR:AR6009965 SOURCE CODE: UR/0137/65/000/012/1033/1033

76
77
3

AUTHOR: Tagirov, R. B.; Stolov, A. L.; Mashkevich, S. A.

TITLE: Measurement of the work function of electrons for certain alloys

SOURCE: Ref. zh. Metallurgiya, Abs. 121246

REF SOURCE: Sb. Itog. nauchn. konferentsiya Kazansk. un-ta za 1963 g. Sekts.: paramagnitn. rezonans, spektroskopii i fiz. polimerov, radiofiz., astrofiz., bion. Kazan', 1964, 25-27

TOPIC TAGS: steel, brass, bronze, molybdenum, electron interaction, monochromatic radiation, work function

ABSTRACT: The work function of electrons of a number of alloys has been measured by photoeffect observation using the coercive-field method. A sample, placed in the center of a spherical capacitor, was irradiated with monochromatic radiation. The measurements were carried out in vacuum $\leq 10^{-6}$ mm Hg over two wavelengths. The work function of electrons (ev) was measured for L-62 (3.9), LS-59-M (3.6), and L-61 (4.1) brass, St Kh18Ni7 (4.0) and St 10 (4.2) steel, B-2 (3.9) bronze, and Mo (3.8) molybdenum. (For heat-resistant alloys with an Mo base, the work function of electrons

Cord 1/2

UDC: 669.01: 532.6

L 31986-66

ACC NR. AR6009965

ranges from 3.6 to 4.4 ev depending on composition and heat treatment. Heat treatment can increase or decrease the work function of electrons. G. Kovalev.
[Translation of abstract] 4
2

SUB CODE: 11, 20/ SUBM DATE: none

Physical Properties of alloys

18

Cord 2/2 LC

GALIAKBAEV, A.S., inzh.; SHALPEYN, S.D., kand. tekhn. nauk;
MASHAEVICH, S.A., inzh.

Effect of pressure in assembling the magnetic circuits of
plane selvyns and phase controllers on the characteristics
of magnetic materials. Elektrotehnika 35 №.1:49-50
Ja '64. (MIRA 17:2)

L 08373-67 EWT(m)/EWP(t)/ETI IJP(c) JD/JG
ACC NR: AR6028149 SOURCE CODE: UR/0058/66/000/005/H067/H067

AUTHOR: Tagirov, R. B.; Stolov, A. L.; Mashkevich, S. A.

69

TITLE: Measurement of the work function of electrons for several alloys

SOURCE: Ref. zh. Fizika, Abe. 5Zh477

REF. SOURCE: Sb. Itog. nauchn. konferentsiya Kasansk. un-ta za 1963 g. Sekts: paramagnitn. rezonans. spektroskopii i fiz. polimerov, radiofiz., astron., bioc. Kasan, 1964, 23-27

TOPIC TAGS: work function, photoeffect, brass, bronze, steel, molybdenum, surface finishing, refractory alloy

ABSTRACT: The method of delayed field and red boundary of the external photoeffect were used to measure the work function ϕ of different brands of brass, steel, bronze, and molybdenum. The measurements were made in an instrument constituting a spherical capacitor in vacuum of $\sim 10^{-6}$ mm Hg. It is established that in most cases ϕ decreases following surface finishing of the metal. When the surface is cleaned, the quantum yield γ greatly increases; γ decreases when the samples are kept in air, owing to the appearance of surface oxides. Investigations of a group of refractory alloys based on molybdenum revealed appreciable changes in ϕ , from 3.6 to 4.4 eV, depending on the composition and heat treatment conditions of the alloys. [Translation of abstract]

SUB CODE: 20

Card 1/1 set

MASHKEVICH, Toriy.

Northern iron. Vokrug sveta no.11:2-7 N '55. (MIRA 9:1)
(Russia, Northern--Mines and mineral resources)

MASHKEVICH, T.

Conquest of Neptune's kingdom. Mauka i shinan' 28 no.1:39-43 Ja
'61. (MIRA 14:1)
(Submarine geology)

LASHLEVICH, T.

Emergency medical service. Razum i zhizn' 28 no. 2:40-44
F '61. (U. 14:2)
(Medical care)

MASHKEVICH, T. (Moskva)

Time of dreams and time of achievements. Nauka i zhyttia 11
no.2.2 of cover F '62. (MIRA 15:3)
(Science fiction)

1-000-66 05522/DT(1)/TS(Y)-1 m/m

ACG-10001-A-000002

SOURCE CODES: US/0004/65/000/100/0006/0009

ADDRESSEES: Admiral Valerian Gerasimov, Head of the KGB Main Directorate, Moscow, Russia

ONCE: -

TYPE: Informational Report

DATES: Received by CIA on 10/10/69

TOPIC: Space hypodynesia, space simulation, space biology, space medicine, space engineering

A detailed and somewhat cryptic description of an experiment in hypodynesia [simulated weightlessness] during space flight to which four reporters were invited by Gerasimov (which [presumably Gerasimov] is prominent specialist in the field of space biology and medicine). The experiment, in which the four journalists participated, was supervised by Valentin Ivanovich [last name not given]. The test involved all four subjects, two of whom were controls, with hypodynesia (head first) in an enclosed chamber for 2.5 hr. Preparation for the experiment included establishing intra-cranial communications between the chamber and monitoring points and unreported medical observations following exercise under normal conditions. Blood tests, pulse and respiration rates, and body temperature were measured before and after the experiment.

L 3955-66

ACC NR AP22775

At the onset of the experiment, the two experimental subjects were centrifuged (5 g) to simulate launch. Radio communications between the subjects were recorded, in which they described their subjective illusions at this time and as the 10-day experiment progressed. Chamber humidity was 36-63%, and the temperature was 10-15C. During the experiment, coordination exercises were conducted, as were psychological and visual tests to determine attentiveness and working ability. Centrifugation again took place at the termination of the experiment to simulate reentry.

Two days of medical examinations followed. It was found that 10 days of hypodynamia lowered the compensatory capacity of the cardiovascular and respiratory systems, disrupted the coordination of movements, weakened muscles, lowered resistance, and decreased intelligence and physical working ability. Muscular mass decreased while the amount of fat increased. It is stated that special countermeasures (not specified) have been developed to overcame these effects on cosmonauts in the future. Further research continues. Five photographs show a subject in a centrifuge seat under static respiration test, taking an oxygen mask off, and a subject in a centrifuge seat during a respiration test. ADD CODE: 016-7

new code: 016-7
new date: 07/12/2001
new page: 000

1-24809-66 PBD/TSS-2/BWT(1)/EWA(d) TT/GW

ACC NR: AF6011001

SOURCE CODE: UN/0004/66/000/003/0006/0007

AUTHOR: Donald J. T.ORG: none

TITLE: An anchor has been cast into the Sea of Storms

SOURCE: Science - file, no. 3, 1966, 6-7TOPIC: Lunar trajectory, lunar environment, lunar mission, lunar landing, trajectory correction, navigation, Moon, lunar surface vehicle/"Luna-9" lunar probe

ABSTRACT: A stage of lunar research, which was primarily connected with the exploration of near-lunar space and the immediate vicinity of the Moon, came to an end when the first photographs of the lunar surface were obtained. Now, more ambitious plans are in the works for the future, namely, closer examination of its structure, radioactivity, and volcanic activity. Space vehicles, which will first carry scientific equipment and then humans to the moon, must, figuratively speaking, "learn" to perform soft moon landings to keep their precious cargo intact. Admittedly, some of Soviet anti-gravity experiments on Earth are not applicable to moon-landings. To perform a safe moon landing, a space vehicle must be capable of carrying out a series of complex operations beforehand, e.g., activation and then separation of the landing module, and turning on and off trajectory-correction thrusters. The Luna-9 was the first successful program which was carried out by the Luna-9 and

12-

L 24809-66

ACC N# AP6011061

which in principle can be carried out by similar or more sophisticated automatic devices. It would include a TV survey of the lunar terrain, lunar soil sampling, collection of meteorological data, interior study by means of a seismograph, the determination of the local and global magnetic field, and the collecting of data both on particle composition, solar activity, and stellar luminosity and telecasting of the results over radio, television, and telephone lines. After landing, the vehicle would collect data from the surface and transmit them to Earth via television. It is also feasible to separate the vehicle from the landing module and have it orbit the Moon to make a measurement of the Moon's gravity field and other physical properties. The data transmitted [REDACTED] have been analyzed and found to be quite accurate.

2

(a)

VASHKEVICH, V. P.

Cand. Tech. Sci.

Dissertation: "The Russian Mine Surveying School."

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I. V. Stalin 1949

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Sum 71

PAVLOV, F. F., MASHKEVICH, V. P.

Science

Spherical trigonometry, Moskva, Igletekhizdat, 1951.

Monthly List of Russian Accessions, Library of Congress, December 1952. UNCLASSIFIED.

PAVLOV, Fedor Fedorovich, professor, doktor tekhnicheskikh nauk; MASH-
KIVICH, Vladimir Pavlovich, kandidat tekhnicheskikh nauk; PAVLOV,
Boris Dmitriyevich, kandidat tekhnicheskikh nauk; PROZOROVSKAYA,
V.L., tekhnicheskiy redaktor

[Geodesy] Geodesiya. Moskva, Ugletekhnidat, 1955. 292 p. (MLRA 5:8)
(Geodesy)

PHASE I BOOK EXPLOITATION 762

Pavlov, Fedor Fedorovich, Doctor of Technical Sciences, Professor;
Mashkevich, Vladimir Pavlovich, Candidate of Technical Sciences,
Docent; Fedorov, Boris Dmitriyevich, Candidate of Technical
Sciences, Docent

Geodeziya (Geodesy) Moscow, Ugletekhizdat, 1955. 356 p. 10,000
copies printed.

Responsible Ed.: Gusev, N.A.; Ed. of Publishing House: Slovorosov,
A.Kh.; Tech. Ed.: Prozorovskaya, V.L.

PURPOSE: This is a textbook designed for mining and mining engineering students at the university level and for independent study by mine workers.

COVERAGE: This manual is published for mining and metallurgical vuzes under the auspices of the USSR Ministry of Higher Education and was written by members of the Moscow Mining Institute under the direction of Professor F.F. Pavlov. Chapters I, II,

Card 1/12

Geodesy

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IV, VI, VII, VIII, IX, and X were written by Professor F.F. Pavlov and docents V.P. Mashkevich and B.D. Fedorov; chapters III, V, XIV, XV and Sec. 19 by B.D. Fedorov, and chapters XI, XII and XIII by Professor Pavlov. The book presents the theory and practice of geodesy as applied to modern mining and mining engineering operations. The text is accompanied by numerous diagrams, maps, photographs and tables. Instruments and methods of making measurements are described in considerable detail. By way of introduction, Chapter I provides a brief account of the historical development of geodesy and particularly its development in Russia. It concludes by stating that in 1940 the Central Scientific Research Institute of Geology and Cartography under Professor F.N. Krasovskiy, redetermined the dimensions of the Earth's ellipsoid and that all geodetic and cartographic work in the USSR as of April 7, 1946 has been based on the new dimensions. The new ellipsoid is known as the Krasovskiy ellipsoid. By 1950 class I triangulations had reached a total of 75,000 km. and class I and II leveling, 150,000 km. A considerable part

Card 2/12

Geodesy

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of the Soviet Union is now covered by a complete network of triangulations. Mentioned in the introduction as having made outstanding contributions in the fields of geodesy and cartography are Professor N.G. Kell', Professor A.S. Chebotarev, A.A. Mikhaylov, N.A. Urmayev, V.V. Danilov, and V.V. Popov, corresponding members of the USSR Academy of Sciences; F.N. Krashevskiy, A.A. Izotov, A.A. Mikhaylov and M.S. Moloden-skii who had worked out new methods of determining the shape of the Earth; and Professor Doctor F.V. Drobyshev, Professor N.M. Aleksapol'skiy, M.D. Konshin, M.M. Rusinov, V.A. Belitsyn, G.Yu. Stodolkevich, and Docent N.A. Gusev, eminent designers of geodetic instruments who have been awarded Stalin prizes for their work.

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Foreword

5

Card 3/12

PAVLOV, Fedor Fedorovich, prof.; MASHKEVICH, Vladimir Pavlovich, dots.;
FEDOROV, Boris Dmitriyevich, dots.; RUDIONOV, L.Ye., otv. red.;
SLAVOMOROV, A.Kh., red. issd-va; BOLDIREVA, Z.A., tekhn.red.;
PROZOROVSKAYA, V.L., tekhn. red.

[Geodesy] Geodesiya. Moskva, Gos. nauchno-tekhn. issd-vo lit-
ry po gornomu delu, 1961. 274 p. (MIRA 14:5)

1. Moskovskiy gornyj institut (for Pavlov, Mashkevich, Fedorov)
(Surveying)

INTERACTION OF VIBRATIONS IN NON-POLAR CRYSTALS WITH ELECTRIC FIELDS. V. S. MEGREVICH AND P.

K. B. Tolpygo,
Dokl. Akad. Nauk SSSR, Vol. 131, No. 3, 615-7 (1960). In Russian.
Infrared lattice absorption in hemi-polar crystals.

The observed infrared lattice absorption in homopolar compounds (diamond, Si, Ge) is not predicted by the theory of the Born lattice but appears to arise from effects similar to those observed in ionic crystals. The energy of a homopolar lattice is expressed in terms of the displacements of the nuclei and the dipole moments of the electronic shells. As well as three acoustic and three optical modes, two additional conditions are found (defined as "right" modes) for which the mutual velocity relations give the dipole moments as not equal to zero. A temperature dependence of mobility is derived via the acoustic modes¹⁻⁴ and for optical modes (in the ACT) at low temperatures and⁵⁻⁷ at high temperatures, where the symbols have their usual significance.

Play

APPROVED FOR RELEASE: 07/12/2001

CIA-RDP86-00513R001032710019-7"

MASHKEVICH, V.S.

CARD 1 / 2

PA - 1985

SUBJECT
AUTHOR
TITLE
PERIODICAL

USSR / PHYSICS

MASKEVIC, V.S., TOLPYGO, K.B.

The Interaction between Oscillations of Nonpolar Crystals and
Electric Fields.
Dokl. Akad. Nauk 111, fasc. 3, 575-577 (1956)

Issued: 1 / 1957

The authors computed the energy U of a homopolar lattice of the diamond type in the function of the displacements u_1^s and the dipole moments P_1^s . On this occasion such states in the crystal were considered to be basic states found in harmonic approximation is explicitly given. The result for U which was linear with respect to displacements and dipole moments of the atoms and are determined in accordance with a variation principle by a minimum condition for U . The equations for the oscillations of the atoms and for the case $E_{ext}^s = 0$ (where E_{ext}^s denotes the exterior electric field in the node s) are solved by means of exponential ansatzes and by a development according to the powers of the lattice constant. Besides three acoustic and three optic branches there are two solutions (the so-called light oscillations), for which $u_1 = u_2 = 0$, $P_1 = P_2 \neq 0$ and $\omega = c|k|/n$ applies. Here n denotes the refraction index connected with polarizability by the usual formula, c - the velocity

Dokl.Akad.Nauk 111, fasc.3, 575-577 (1956) CARD 2 / 2 PA - 1985

ity of light, \vec{u}_1 and \vec{u}_2 - development coefficients in the exponential ansatze for the displacement of nuclei, \vec{P}_1 and \vec{P}_2 - analogous development coefficients for the dipole moments. In first and second approximation with respect to $|k|a$ (where a denotes the lattice constant) it is possible to find the dependence of ω (\vec{k}), \vec{u} and \vec{P} for all branches. On the basis of the experimental values of n and ω_0 (RAMAN frequency) the parameters of the theory were determined. A special investigation is necessary in the case of the equality of optic- and light oscillations $c|\vec{k}|/\vec{n} = \omega_0$. By methods based on the perturbation theory it is possible to show that in the neighborhood of $|\vec{k}_0| = n\omega_0/c$ there exist four mixed oscillations with non-vanishing \vec{u}_1 , \vec{u}_2 and $\vec{P}_1 + \vec{P}_2$ instead of two optic and two light oscillations. Therefore a marked dispersion occurs near the light point ω_0 in the case of light oscillations. On the basis of the results obtained the absorption of light of the first order by homoeopolar crystals can be explained. The exterior field of light causes a polarization $\vec{P}_1 + \vec{P}_2$ of the crystal. This polarization leads to a transition of electric energy into oscillation energy. Further investigations confirm all qualitative results of the theory, particularly the optic anisotropy of cubic crystals mentioned here.

INSTITUTION: State University KIEV.

MASHKEVICH, V.S.

PRIKHOT'KO, A.F.
 26(7) p.3 PHASE I BOOK EXPLOITATION Sov/1365
 L'vov. Universitet
 Materialy I Vsesoyuznogo soveshchaniya po spektroskopii. t. 1:
 Molekul'arnaya spektroskopiya (Papers of the 10th All-Union
 Conference on Spectroscopy. Vol. 1: Molecular Spectroscopy)
 [L'vov] Izd-vo L'vovskogo univ-ta, 1957. 499 p., 4,000 copies
 printed. (Series: Ita: Pis'mennyj sbornik, vyp. 3/6/)

Additional Sponsoring Agency: Akademiya nauk SSSR. Komissiya po
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 Candidate of Physical and Mathematical Sciences, and Glazberman,
 A. Ye., Candidate of Physical and Mathematical Sciences.

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AUTHOR:

MASKEVICH, V.S., TOLPYGO, K.B.

PA - 2965

TITLE:
PERIODICAL:

Electrical, Optical and Elastic Properties of Diamond Type
Crystals. I. (Elektricheskiye, opticheskiye i uprugiye svoystva
kristallov tipa almaza. I. Russian)
Zhurnal Ekspерим. i Teoret. Fiziki, 1957, Vol 32, Nr 3, pp 520-525
(U.S.S.R.)

Received: 6 / 1957

Reviewed: 7 / 1957

ABSTRACT:

Taking account of the deformability of atoms results in a delayed interaction for homoeopolar crystals caused by the reciprocal dependence of exchange integrals and dipole moments, so that optical, electrical, and elastic properties of the crystal may be dealt with from a uniform point of view. Further, the order of magnitude of lattice oscillation absorption, which was found experimentally by M.LAK and E.BURSTEIN (Phys.Rev. 97, 39, 1955), can be predicted without introducing free parameters. The energy of the crystal is written down as a function of the displacements and dipole moments of the atoms. As restriction to central forces has been abandoned, four interaction parameters result (instead of three in the case of ion crystals). As the necessary wave functions are not known sufficiently well, these parameters must be determined experimentally.

Card 1/2

PA - 2965
Electrical, Optical and Elastic Properties of Diamond Type
Crystals. I.

The present part I ends with the equations of motion derived from the energy expression, which also contain the required dependence of the shifting of the atoms and their polarization. The above mentioned effects resulting from this dependence will be investigated more closely in the following part II. (Zhurnal Eksperim. i Teoret. Fiziki, 1957, Vol 32, Nr 4). (7 Citations from Published Works).

ASSOCIATION: State University Kiev
PRESENTED BY:
SUBMITTED: 18.7.1955
AVAILABLE: Library of Congress

CARD 2/2

PATENT
TYPE

MASHKEVICH, V.S.

364-25,32

Electrical, Optical and Elastic Properties of the Crystals
of the Type of the Diamond II. The Oscillations of the
Lattice with respect to the Dipole Moments of the Atoms.
(Elektricheskiye, opticheskiye i uprugkiye svoystva kristallov
tipa almaza. II. Kolebaniya reshetki s uchetom dipolnykh
momentov atomev.- Russian)

PHILOSOPHICAL

Zhurnal Eksperim. i Teoret. Fiziki 1957, Vol 32, Nr 4,
pp 866 - 873 (USSR)

ABSTRACT

The present paper investigates the equations of motion which
correspond to the energy found in the first part of this
paper (V.S. MASHKEVICH, K.B. TOLPYGO, Zhurnal Eksperim. i
teor. fiz., 32, 520 (1957)).

The equations of motions are as follows:

$$m \ddot{u}_s^1 = - \delta U / \delta u_s^1, 0 = - \delta U / \delta \dot{u}_s^1$$

Here U denotes the potential energy of the crystal and the
functions \dot{u}_s^1 denote the shifting of the atoms.

The solution of these equations is set up in form of plane
monochromatic waves. The further chapters of this paper deal
with the following: acoustic oscillations, optical oscillations.

ED 1/3

56-4-29/52

Electrical, Optical and Elastic Properties of the Crystals
of the Type of the Diamond II. The Oscillations of the
Lattice with respect to the Dipole Moments of the Atoms.

oscillations of light, the μ -surrounding of the singular point, investigation of the general equations of motion. The restrictions assumed in the first part of this paper mentioned above do not destroy the generality of the qualitative results obtained here.

For this purpose the author investigates the general equations of the long-wave harmonic oscillations.

Summary of Results: The spectrum of the oscillations consists of 9 branches (far from the singular point - 3 acoustic, 3 optical and 2 light branches). In the neighborhood of the singular point the optical branches pass over into the light branches and vice versa.

In the case of or nonsingular directions $\vec{\delta}$ stripping off and going over into one another occurs only in the case of the two light branches and of the three optical branches; in the case of the singular directions $\vec{\delta}$ this applies for one light branch and one optical branch. The theory qualitatively explains the absorption of light. Absorption must depend upon the direction $\vec{\delta}$ and upon the polarization of the light wave. Further, a double radiation diffraction must exist which

AB 2/3

55-11-22/12

Electrical, Optical and Elastic Properties of the Crystals
of the Type of the Diamond II. The Oscillations of the
Lattice with respect to the Dipole Moments of the Atoms.

attains its maximum in the neighbourhood of the singular
point. The crystal contains 7 optical axes. The conductive
electron must enter into interaction with the acoustic and
well as with the optical oscillations. With respect to
quality these results do not depend upon a special selection
of the potential energy U .
(2 Illustrations)

ASSOCIATION: Polytechnic Institute KIEV

PRESERVED BY: -

SUBMITTED: 13.11. 1955.

AVAILABLE: Library of Congress.

CARD 3/3